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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,648	06/14/2001	Neal R. Butler	L0501/7035	6945
23628	7590	03/05/2004	EXAMINER	
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			NGHIEM, MICHAEL P	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/881,648	Applicant(s) BUTLER, NEAL R.	
	Examiner Michael P Nghiem	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

The Amendment filed on December 15, 2003 has been acknowledged.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Butler (WO 97/01926).

Butler discloses all the claimed features of the invention including:

- an apparatus and method for compensating errors in at least a first image signal (Fig.

1) comprising:

- a first sensor (sensor in array 102) of an array (102) of sensors to detect radiation (page 6, lines 26-27) and to output a first image signal (343) based on the radiation detected by the first sensor (Fig. 1);

- offset correction circuitry (302) to compensate errors in at least the first image signal and to output at least a corrected first image signal (page 5, line 28 – page 6, line 4), wherein the offset correction circuitry includes means for providing at least one time-varying compensation signal that is added to the first image signal to generate the corrected first image signal (page 2, lines 15-17, Fig. 4);

- the apparatus comprises a plurality of sensors (sensors in array 102) including the first sensor, the plurality of sensors outputting respective image signals based on the radiation detected by each sensor of the plurality of sensors (Fig. 1), and wherein the means for providing at least one time-varying compensation signal includes means for providing a different time-varying compensation signal for at least two sensors of the plurality of sensors (page 32, lines 10-13);

- the means for providing at least one time-varying compensation signal includes a capacitor (16, 180);

- the at least one time-varying compensation signal is based on a charging and a discharging of the capacitor (Fig. 4);

- the means for providing at least one time-varying compensation signal includes a compensating source to compensate changes in at least the first image signal due to current-induced heating of at least the first sensor (page 22, lines 11-17);

- the means for providing at least one time-varying compensation signal includes means for providing a variable current (page 22, lines 14-15);

- the means for providing the variable current includes means for adding the variable current to the first image signal such that an average value of the variable

current and the first image signal remains essentially constant during a signal sampling period (page 2, lines 27-29);

- the means for providing at least one time-varying compensation signal includes means for providing a variable voltage (page 8, lines 8-9);

- the means for providing the variable voltage includes means for adding the variable voltage to the first image signal such that an average value of the variable voltage and the first image signal remains essentially constant during a signal sampling period (page 18, lines 2-5);

- the first sensor is a microbolometer (page 6, line 27).

### ***Response to Arguments***

2. Applicant's arguments filed on December 15, 2003 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that Butler (PCT/US96/11014) belongs to the same family as the present application, and therefore may not form the basis of a rejection of the present application. Applicants made a claim for domestic priority under 35 USC 120 and/or 121 on **October 3, 2002**.

However, the priority claim made by Applicants was untimely. According to MPEP

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201.11, for utility and plant applications filed on or after November 29, 2000, claim for

benefit under 35 USC 119(e), 120, 121, and 365(c) must be made during pendency of the application and within the later of 4 months from the actual filing date of the application (June 14, 2001) or 16 months from the filing date of the prior application (May 26, 1998) (37 CFR 1.78(a)(2) and (a)(5)). The later time is **October 14, 2001**. Thus, the present application cannot benefit from the filing date of prior application 08/981,109 and, therefore, does not belong to the same family as PCT application PCT/US96/11014 or Butler (WO 97/01926).

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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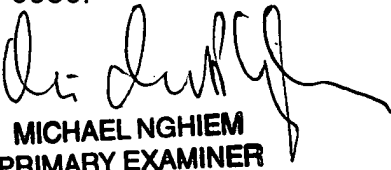
**Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2272. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (571) 272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.



**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

March 1, 2004

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